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2                   **PWM DIGITAL AMPLIFIER WITH HIGH-ORDER LOOP FILTER**

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5                   **ABSTRACT**

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7   An improved PWM amplifier is disclosed that uses multiple integrators in the loop filter to  
8   provide high loop gain across the frequency band-of-interest. The frequency characteristics of  
9   the loop filter are optimized to distribute large loop gains across the entire band to provide large  
10 suppression of noise and distortions generated in the modulation and output stages.